CHOLESTEROL TRANSPORT GENE

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Abstract

Methods and compounds are disclosed for lowering serum LDL levels or serum cholesterol levels, or for reducing the transport of cholesterol from the gut to the blood or the lymph, based on the observation that a gene known as ABC1 is necessary in order for cholesterol to be transported from the intestinal lumen into the bloodstream. A mutant chicken phenotype, known as the WHAM chicken, characterized by low levels of serum LDL and reduced transport of cholesterol, facilitated the discovery of this function of the ABC1 gene. Techniques which act to inhibit ABC1 activity in the cells of the intestinal wall will result in lower serum cholesterol.

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(57) Abstract: Methods and compounds are disclosed for lowering serum LDL levels or serum cholesterol levels, or for reducing the transport of cholesterol from the gut to the blood or the lymph, based on the observation that a gene known as ABC1 is necessary in order for cholesterol to be transported from the intestinal lumen into the bloodstream. A mutant chicken phenotype, known as the WHAM chicken, characterized by low levels of serum LDL and reduced transport of cholesterol, facilitated the discovery of this function of the ABC1 gene. Techniques which act to inhibit ABC1 activity in the cells of the intestinal wall will result in lower serum cholesterol.